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The Teachers College Journal seeks to present competent discussions of professional problems in education and toward this end restricts its contributing personnel to those of training and experience in the field. The Journal does not engage in re-publication practice, in belief that previously published material, however creditable, has already been made available to the professional public through its original publication.

Manuscripts concerned with controversial issues are welcome, with the express understanding that all such issues are published without editorial bias or discrimination.

Articles are presented on the authority of their writers, and do not necessarily commit the Journal to points of views so expressed. At all times the Journal reserves the right to refuse publication if in the opinion of the Editorial Board an author has violated standards of professional ethics or journalistic presentation.

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OCTOBER COVER

On July 1, 1961, Indiana State Teachers College became Indiana State College. The law creating the name change also provided for a separate Board of Trustees for Indiana State College. Pictured on the October cover is the new college board. (Seated, from left to right are Dr. Wayne Crockett, Vice-President of the Board; Myron J. Busby, Board President; President R. W. Holmstedt, President, I.S.C.; Dr. Hilda Maehling, Secretary, and Miss Mary Jessie, Assistant Secretary. Standing left to right: William R. Kendall; J. Kenneth Moulton, Business Manager of I.S.C and Board Treasurer; James Acher and William E. Wilson, State Superintendent of Public Instruction, ex officio Board Member).

EDITORIAL

Indiana State College

On July 1, 1961, Indiana State Teachers College officially became Indiana State College. The change of name came about as a result of the passage, by the Indiana General Assembly, of House Enrolled Act No. 267 signed into law by Governor Matthew E. Welsh on March 6, 1961. The full text of the law is given in Chapter 141, Acts of 1961.

The change in name is in keeping with the nationwide trend in which state institutions for teacher education are evolving from single-purpose institutions into state institutions with multi-purposes. No longer are these institutions concerned solely with the objectives of teacher preparation. By and large the majority of such institutions now offer a wide variety of curricula for students who are interested in professions other than teaching. These curricula include liberal arts programs, pre-professional offerings, and specialized programs in business, industry, and other vocations.

The history of state supported institutions for teacher education extends over a period of nearly a century and a quarter. The first state normal school, established at Lexington, Massachusetts, opened its doors on July 3, 1839. By 1850, six state-supported normal schools were in operation. The function of the early normal school was conceived to be solely that of improvement of the preparation of elementary school teachers. The elementary school was the only type of public school since secondary and higher education was left to private and denominational agencies.

Following the acceptance of the normal school idea by 1850, there was a rapid growth in the number of such institutions. The State Normal School at Terre Haute, Indiana, established under an act of 1865 opened five years later, January 6, 1870. By 1900, similar institutions had been established throughout the country.

With the development of public secondary schools by 1900, the normal schools began the practice of requiring high school graduation for admission and thus assumed the function of higher education. In keeping

with this new role, the normal schools became state supported teachers colleges. Indiana State Normal School was established as Indiana State Teachers College in 1929. By 1950, virtually all of the old state normal schools had become state teachers colleges.

Since 1950, following World War II and with increasing demands for higher education, the state supported teachers colleges have been expanding their programs to help meet the pressure for higher education for those interested in areas other than teaching. Thus in the past decade, the state teachers colleges have evolved into multi-purpose state-supported institutions serving the needs of the student clientele regardless of the curricula preferred. Indiana State Teachers College in line with this trend has been expanding its program into areas other than teaching. Thus the change in name to Indiana State College is indeed only logical as the new name is most descriptive of its present role.

However, Indiana State College will undoubtedly be concerned primarily with teacher education for a number of years to come. The majority of its students are and will continue to be primarily interested in teacher education. The institution has gained a national reputation in this field and it is indeed fitting that it will continue its leadership in this area. It was, therefore, felt desirable that the *Journal*, which begins its thirty-third year of publication with the October issue, should continue as *The Teachers College Journal*. The *Journal* subscription list includes those institutions and individuals that are vitally concerned with teacher education. Articles of the *Journal* are listed in the *Education Index* and libraries throughout the country carry bound volumes dating back to 1929. It is hoped that the *Teachers College Journal* will continue to be an educational asset in the professional libraries of all persons desirous of continued improvement in the profession of education and teacher preparation.

CHARLES HARDAWAY
Editor

Thirteenth Indiana Workshop On Teacher Education

Turkey Run State Park

November 14-15,
1960

Perspectives For The Prospective 1960's

J. R. Rackley

Dean, College of Education,
Pennsylvania State College

*Summary of the Keynote Address by J. R. Rackley, Dean,
College of Education, Pennsylvania State University.*

• "WHAT IS the measure of man?", the first question of the keynote address delivered by Dean J. R. Rackley of the College of Education of Pennsylvania State University was followed by its companion question: "What knowledge is of most worth?"

With these two questions posed before the Teacher Education Workshop, Dean Rackley evaluated teacher education in terms of the needs of students destined to be the teachers of the 60's, 70's, 80's. This evaluation concerned the two methodologies. The first methodology is that of the discipline trying to establish facts and organizing and interpreting these facts. This approach to truth, offered by the disciplines, should be respected. The second methodology is that of teaching as related to individuals, the subject taught, and environmental circumstances. Dean Rackley asserted that there should be a moral assessment of the knowledge which is worth being learned by the student.

The 1960's are the result of past decades; as we view education now we see it elevated to a place of national prominence. Certainly some areas to be considered in a current evaluation of teacher education would include those of:

1. Population change, shift and mobility.
2. Organization, changes resulting from organization.

the man called "organization man."

3. Increased role of government as related to population growth, technological change and world position of the United States.
4. Increasing level of education achievement and educational requirements in our present economy and emerging economy.
5. Expanding and utilizing the better media of communication.

Dean Rackley continued with the observation that we may have failed in our teacher education programs to give the student intellectual disciplines in order to develop the potentials of excellent teachers. The humanities, the social and behavioral sciences must be of prime importance in the teacher preparation curriculum. These give teachers the basis for making value judgments; it gives them the intellectual insights to assess values. In the end the teacher should be evaluated as a thinker; as a reasoned observer; as an organizer of learning; and finally as a performer, noble in his profession.

The final evaluative question of the key note speaker was: "Do our programs of teacher education measure up to our students' needs (all our needs, for that matter) for becoming and remaining resourceful, intellectual, learned and responsible adults, capable of performing in their roles as teachers in such ways as to bring credit to themselves, stature to their profession, and immeasurable benefit to the society and culture of which they are an indispensable part?"

Robert H. Wyatt

*Executive Secretary,
Indiana State Teachers Assn.*

Legislative Needs For Indiana Education

- THE SCHOOLS of Indiana are in need of more adequate funds, the establishment of state teacher certification standards in keeping with the urgent requirements of our time, and a drastic and comprehensive reorganization of local school government.

The percentage of state funds for the support of Indiana's public schools has experienced a steady decline over the past ten years from approximately 40 to 30 percent. This trend is contrary to the national trend and must be reversed if Indiana's schools are not to suffer a relative deterioration when compared to the rest of the nation.

The appropriation made by the General Assembly in 1959 was \$205.5 million. If the state is to pay its share of the cost of education during the next two years including the cost of an enrollment increase of 30,000 pupils annually, the General Assembly of 1961 must appropriate \$266.2 million to do the job.

It is obvious that this much money when combined with other increased requirements of the state is not in existence. It follows then very logically that the state of Indiana must drastically reform and increase its state tax structure and revenues. Whether the divided political complexion of this General Assembly will rise to the occasion is seriously doubtful. It is our hope, therefore, that widespread public support will be given to the educational program which is obviously so critically in need.

The raising of state standards for teacher certifi-

cation is a long-term program that must be carried out by the state. Teacher education requirements have been improved in Indiana very substantially, and it is imperative that this relatively high standard be maintained. Our problem in this field is not legislation, but rather a continuing study and refinement by the members of the profession. Alongside this raising of standards must come financial support of the state geared to the degree that local communities do raise standards of their teachers. The 1959 School Reorganization Law was a tremendous step forward in Indiana education. It has had less than 18 months experience to indicate what results will follow. In this 18 months, however, there have been almost amazing results. A number of counties already have proposed county-wide administrative units, and other counties have proposed two or more units large enough for efficient, economical administration.

The General Assembly in 1961 need not do much to this law other than strengthen it and correct some minor technical weaknesses that exist. The principal change that is needed is to speed up the facilities for holding referenda on the county-proposed plans. In addition to this, several other minor changes to take care of fragmentary townships and the issuance of certain civil aid bonds in some townships need to be enacted.

If the entire profession is willing to work harmoniously on a broad program and if the public is as vitally interested in the schools as it needs to be, a good program for education can be enacted in 1961.

Sparkle G. Crowe

Member Indiana State Commission on Teacher Education and Certification

Keeping Abreast With Changes

- THE TEACHER Training and Licensing Commission in Indiana is in the process of revising its rules for teacher certification.

For the past two years 35 committees and over 250

teachers from all areas and levels have been taking a long, hard look at what type of academic and professional preparation is necessary to produce the finest and best qualified teachers that can be supplied for Indiana classrooms. Their recommendations have been submitted to the Commission. When these rules are placed in

effect there should be marked advancement in the training and certification of teachers in Indiana.

The first advance is in the area of broad general education. Both North Central and NCATE have stated that "all teacher education curricula should require a pattern of general education in such amount and of such nature as to assure that all teachers will be broadly educated and cultured persons."

The New Horizon's Program of the TEPS Movement states:

"General education is an effort to provide functional acquaintance with the basic facts and principles of the major divisions of man's intellectual and spiritual resources. It selects from and uses the liberal arts and sciences to illuminate personal problems and those of the society in which men live. It is focused on the needs and responsibilities which men have in common; it applies to those aspects of development which help the individual to become a more alert, cultivated and responsible citizen."

No final decision has been made, but it looks as though the general education requirement will be 60 semester hours for a five-year program culminating in a Master's Degree, with 50 hours completed at the undergraduate level.

The second advance is the elimination of the wide and deep specials at the undergraduate level. Indiana is the only state that has had these.

Generally the recommendations are:

1. Students preparing for secondary teaching will build majors of at least 40 semester hours and minors of at least 24 semester hours.
2. Students preparing for elementary teaching will so organize their programs that two minors of 15

semester hours may be built, with one built to 20 semester hours.

The third advance being evolved is the establishment of a truly unified five-year teacher education program.

Under the proposed plan the teacher education program will be so organized and planned as to culminate in a Master's Degree containing a minimum of 154 semester hours.

Areas of general education, teaching specialization and professional education will be so planned as to be completed with the Master's Degree, and upon the completion of three years of teaching experience will qualify the holder to obtain a professional or permanent certificate.

There are at least three major problems that are evident to the commission as they work on the final plans for this program.

1. How can the recommendations of the various committees be co-ordinated and synthesized?
2. What effect will this program have when the institutions preparing teachers apply the program to their own situation? The commission is mindful that these programs must be worked out within the framework of the facilities and purposes of the institution.
3. Does a completed program have to be contained in a minimal Master's Degree?

The Commission is hopeful that this revision of certification patterns will be a step toward achieving one of the major objectives of the New Horizon's Program when it proposes that a unified profession assume its full responsibility for the development of a sound program of teacher education which will insure competence for the members of the profession.

Dean F. Berkley

*School of Education,
Indiana University*

• THE SCHOOL Corporation Reorganization Act of 1959 (popularly referred to as Senate Bill 6) mandated each county in Indiana to engage in a self-study for purposes of reorganizing administrative units. This sweeping legislation represented the only mandate of its kind in over 100 years! The state has always assumed the responsibility for providing a uniform and general system of schools and has permitted consolida-

tion over the years. Following are some of the factors, however, prompting the introduction and subsequent implementation of Senate Bill 6: Limited educational offerings in some schools; disparity in assessed valuation per pupil within a county; inability of some schools to attract better prepared teachers; lack of special services in many schools; wide range of cost per pupil; and the failure to get an equitable return for money expended.

School Reorganization

Administrative units with a minimum of 1,000 pupils (grades 1-12) and \$5,000 assessed valuation per pupil are called for under this act. All new corporations are to be administered by a board of school trustees. Each county committee shall decide whether the respective boards are to be appointed or elected. The proposal by each county committee, following state approval, is then subject to approval of the citizens by petition or referendum.

Sixteen months have passed since the first county committee was appointed. Fifteen counties have had their proposals approved by the state committee and six counties now have the citizen mandate to organize new school corporations. Fifty-five counties have plans formulated for state approval and will then seek approval by the citizens. If present proposals are implemented, it would result in a reduction of the number of school corporations from 732 to 141!!

The results of this reorganization pose a multitude of challenges for our profession. The implication for teachers and teaching are interesting to contemplate and will demand our increased attention as we build better programs in Indiana.

DISCUSSION GROUP I

Topic: What Values Should Be Emphasized in Teacher Education in the 1960's?

Discussion Leader: Graham Pogue, Ball State Teachers College

Consultants: Milton Kraft, Earlham College
Bernard Kohlbrenner, University of Notre Dame

Recorder: Florence C. Guild, DePauw University

The group began its discussion with consideration of questions raised by Dr. J. R. Rackley: "On what basis do you make value judgments? Out of what context do you assess values?" It was agreed that a "value" should be defined as something a person or group holds to be worthwhile. Anything is a value in a society when the society holds it to be desirable and seeks to perpetuate it. The values of a particular culture are the ideals of the culture. It may also be said that the values are the goals of a culture, and that this includes attitudes toward what is judged worthy and valuable.

Although many think of truth and values as on opposite poles, in the ultimate they cannot be separated. All the disciplines, including religion, try to approach truth but by different means. For example, religion uses its unique method; science uses the experimental ap-

proach. Each discipline strives toward the same end, yet each has a different approach to that end. Furthermore, each discipline must commit itself to values inherent within it.

Then, are there particular values that are intrinsic in teaching? If so, what are they? What are their implications for teacher education in the 1960's?

In the discussion, the members agreed that their values were similar and that these values were held within the framework of their culture and of their personal orientation and beliefs. They differed as to the sources of their values and the sanction they appealed to according to the types of schools represented. This experience of disagreement as to sources seemed to the group to be illustrative of that which teachers find in their own communities. The implication for teacher education, therefore, is that prospective teachers must be prepared to be alert to the fact that their patrons will also disagree as to the sources of their values.

An important value agreed upon as intrinsic in the training of teachers and requiring additional stress in the 1960's is that of intellectual honesty. Democracy demands responsibility of its citizens, the ability to make discriminating, judicious choices. How is the possession of intellectual honesty reflected by the citizen who makes such choices? It was agreed that the citizen reflects this value when he examines both sides of an issue, taking into account all facts, viewpoints, and aspects of the problem in making his choice. Teacher education must develop critical habits of mind and the integrity of arriving at reasoned conclusions of one's own. Those responsible for teacher education need to make clear in their own teaching the distinction between raw facts and the meaning they attach to them.

The group agreed further that along with intellectual honesty another quality is important to the development of a mind that can solve the problems of the decade. This is creativity. One way to encourage their students to think creatively is to provide situations (on examinations, for example) in which the students may weigh the same facts, points of view and aspects of the problem used by the teacher and reach defensible conclusions of their own, even if these conclusions are opposed to those of the teacher. Other methods include discussion that develops logical thinking, the establishment of criteria, and the use of original instead of secondary sources.

The group stated that the teacher's methodology affects the development not only of intellectual honesty but also of respect for human dignity which is another important value to receive increased stress in the 1960's. Without being paternalistic, the teacher can and should build attitudes of respect for individual rights and jus-

tice for all persons of the different socio-economic groups of any creed or color.

This phase of the discussion led to the question, "Should the teacher assume an aggressive role in changing the mores of a community that disregards the worth of certain individuals, particularly that of the Negro? Many felt that an aggressive role was proper. In exerting this role the teacher rightly looks beyond the local community to the larger society for his authority. The implication was clear that teacher education should sensitize the prospective teacher to the fact that communities differ in values. When these values are not harmonious with those of the larger society, the teacher must not withdraw. He must be prepared to participate in community affairs and to exert whatever efforts he can to change the mores of the community. He must fulfill his role as a citizen as well as his role as a teacher.

In the final session, the group discussed the need for developing within the teacher an enthusiasm for teaching as a profession to be pursued as a career and not as an interim job. It was pointed out that advances have been made through external and internal forces. As an illustration of the work of internal forces, the improved relationships between the colleges, high school, and elementary schools, and between the various disciplines were cited. It was agreed that the growth of professional attitudes might indeed be considered a value worthy of the attention of teacher education. The teacher who enters the profession in the 1960's should feel that he is assuming an important, demanding role requiring him in its fulfillment to look to the highest ideals of his profession.

GROUP I PARTICIPANTS

Easton, Roger, Art Department, Ball State Teachers College
Guild, Florence C., DePauw University
Hortense, Sister M. O.S.F., Marian College
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McCrary, Jack, Hanover College
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Puckett, Orville, Oakland City College
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DISCUSSION GROUP II

Topic: What are the Implications of New Accrediting Programs for Teacher Education?

Discussion Leader: Edgar Stahl, Principal, Manual High School

Consultants: Ernest Smith, Director, Teacher Training and Licensing Division

Recorder: Corinth Lange, Huntington College

I. Chairman Stahl made some introductory remarks, suggesting topics that might come into the discussions. His suggestions were:

- A. Should there be more learning on the job, with occasional visits to the campus?
- B. Should there be more flexibility, allowing each institution to tailor its own program?
- C. Do we need more subject matter concentration in certain areas?
- D. The possibility of more time for student teaching was suggested. The five year plan was a suggestion with the entire faculty being involved as much as possible.
- E. The quality of the work of certain teacher training institutions should be evaluated very carefully, with the idea that some may not be qualified to train teachers.

II. The first topic for discussion was "Learning on the Job."

- A. Since there is little time for training on the job due to the heavy schedules of most beginning teachers, it seems most of the training should be done before the teacher takes a position.
- B. How can we have breadth and depth of training in four years? Since there is some question here, the five year plan is being offered as a solution.
- C. A number of colleges are offering or requiring more than 50 hours of general education suggested by the State Department; therefore, no one questioned the requirement, but it seemed to be the consensus that general education ought to be defined. Certain general education subjects may be counted in the major.

D. The proposed 60 hours of general education is to be completed in five years.

- E. The possibility of training teachers in one comprehensive area was somewhat discounted due to the many smaller high schools. There is still a need for the restrictive areas. Teaching efficiency based on the number of college hours taken was questioned.

III. Screening: How do we select the right people?

- A. This is of interest to the accrediting agencies.
- B. Screening is not a one-shot affair. It should go as far back as the high school counselor. There is a

certain elimination going on when teachers are on the job, but the idea that it should be a continuous process is acceptable to all.

C. Grades, testing, committees, and departments are ideas suggested for screening aids during the sophomore year in college. The sooner prospects are screened the better since there is the problem of transferring to a different institution.

IV. Practically the same amount of general education should be required of elementary and secondary students. A few schools are now requiring a foreign language as well as a major field.

V. In the past, it has seemed that elementary teachers have feared teaching science. This feeling will decrease with better training.

VI. Student teaching does not mean internship.

A. Increasing the hours for student teaching is not the answer. Internship, while good, may have the same disadvantages as the present student teacher-supervising teacher system. Proper supervision seems to be the key. To this end, the requirements for elementary principals is being raised to include supervision.

B. Student teaching is considered one of the most valuable experiences in the training of teachers. While it need not be standardized, it should have standards.

VII. The standards of the National Council for the Accreditation of Teacher Education will be used in the future, to judge teacher training institutions in the State of Indiana. NCATE has certain advantages.

A. The advantages given were:

1. Free flow of teachers across state lines
2. Transfer of students facilitated
3. Reciprocity of records between and among states
4. Provide employment officers with a measure of quality
5. Raise standards of preparation for the profession
6. Support administrative officers against pressures which might impair quality of teacher education

B. NCATE differs from regional accrediting organizations although it assumes regional accreditation before examination of any college.

C. The examining team is composed of five persons who visit the campus for three days. It is to be understood that the examining team is not a recommending team, but purely an evaluating group. The examination takes place in seven areas outlined by the organization.

D. NCATE will not review a college unless there is a fairly good possibility of success. Size of the institution is not the main criteria. An institution may be recognized for certain parts of its program, even though a complete recognition may be given. The organization is interested in the success of the products of the colleges examined.

VIII. A Television program presented Sunday evening was discussed: INFLUENTIAL AMERICANS.

A. The program showed master teachers in operation, which should have a tendency to attract strong people to the field of teaching.

B. While television will not replace the teacher, teachers can learn considerably from watching the techniques of T.V. teachers. It is an excellent resource or tool of learning. There is the possibility of losing the personal relationships in T.V. teaching which uses, as a rule, the team approach.

C. Teachers should become acquainted with the possibilities of T.V. teaching. Students will need to be taught the techniques of listening, observing and taking notes from this type of teaching.

IX. The Permanent or "Professional" certificate was discussed.

A. Should the certificate require a Master's or its equivalent?

B. Certain students who graduate from the A.B. course with a grade average of "C" have a problem of finishing a Master's Degree without a requisite "B" entering average. Consequently, in some institutions the Master's Degree is almost meaningless. It was agreed the grade is somewhat relative and not the only criteria to be used for entrance to graduate study.

C. A final question was voiced by the group. Is the teaching field going to be able to compete with other professions for capable candidates?

GROUP II PARTICIPANTS

Implications for Accreditation

Arganbright, Fay, Department of Education, Indiana University
 Book, Howard A., Dir. of Teacher Educ., Manchester College
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 Walsh, J. Hartt, Dean, Coll. of Educ., Butler University
 Woolman, Lloyd, Grace College
 Brewer, Wenonah G., Indiana State Teachers College

DISCUSSION GROUP III

Topic: What Curricular Changes are Necessary in Teacher Education to Meet the Needs of the 1960's?

Discussion Leader: Richard Thursfield, Indiana State Teachers College

Consultant: Victor B. Lawhead, Ball State Teachers College

Recorder: Maurice J. Eash, Ball State Teachers College

Group III's discussion of the topic, what curriculum changes are necessary in teacher education to meet the needs of the 1960's, was focused around the following three questions: (I) With increased interest and responsibility for teacher preparation being shared by the teaching profession, what significant changes may be in order for the program of teacher education? (II) Is there a need for a re-examination of the disciplines such as sociology, psychology, and cultural anthropology and perhaps communications for content pertinent to the preparation of good teachers? (III) Is it possible to consider seriously an integrated five-year rather than a four-plus-one-year program in teacher education?

Only the main points of the group's discussion are summarized below. In the course of the discussion issues peripheral to the three questions were touched upon; the summations of these ideas were included only when they have direct relevance to the main discussion questions.

I. With increased interest and responsibility for teacher preparation being shared by the teaching profession, what significant changes may be in order for the program of teacher education?

There was lack of agreement among the group on some of the specific implications for teacher education that increased professional responsibility for standards and practices might have, but there was general accord that teacher preparation curricula as we now know it must undergo great change. Some of the ideas discussed by the group were:

1. Teachers will have greater resources than ever with which to work, but depending largely upon their training teachers will be able to capitalize upon these technological advances. Consequently, the teacher education curricula must be more responsive to these technological advances, and be sensitive to narrowing the time gap that now separates technological developments and their general implementation in the teacher education curriculum, if teachers are to be adequately equipped to utilize the advances of the technological revolution.

2. Due to the increased skills which teachers at all levels will be required to have, the majority of this group expressed the thought that it would be necessary for all teachers to have some contact with professional education regardless of the level on which they were to be teaching. Professional preparation in the light of the teaching. Professional preparation in the light of the acceleration of change might well be considered a continuous process with the state stimulating and encouraging individual efforts through support of in service training and the elimination of permanent licenses. A dissenting opinion on continuous in service was registered when a group member pointed out that such work could be interpreted as reflecting upon the type of teacher produced by our present curriculum, a person who failed to have sufficient commitment, interest and motivation to keep abreast of his profession.

3. The group expressed concern for professional alertness especially since the only stable characteristic of the future seems to be change. Group III focused a major share of their discussion on the designing of a teacher preparation curriculum which would produce a person who would reflect as part of his inner dynamics a self-generated interest in keeping attune to the latest advances in his profession, and would be not only a consumer of researches and professional knowledge but also would be motivated to be a contributor to the research process. The best method of achieving these desired qualities through deliberate curricular design was the source of considerable speculation. Undoubtedly, no one can point to a specific such as a course, an instructor, or an experience and establish with any degree of certitude that he has isolated the essential variable. Nevertheless, there was general agreement that the inculcation of the desire to be out on the "cutting edge of knowledge" is probably a function of the entire teaching process in which courses are treated as the vehicle for learning rather than the end results. To stimulate creativity, curiosity and the ability to communicate knowledge with stimulation probably involves influencing the basic value structure of our teacher candidates. The group's discussion concluded with a question: How can more value-generating experiences be developed in the teacher education curriculum, especially those experiences which will enhance the individual's capacity to increase professional competency once he graduates from the teacher preparation institution?

II. Is there need for a re-examination of the disciplines such as sociology, psychology, and cultural anthropology and perhaps communications for content pertinent to the preparation of good teachers?

I. Group III explored this question chiefly as these disciplines contribute to the general education of every

teacher. A good general education program, which the group agreed should constitute a goodly share of the teacher education curriculum, would have much of its materials drawn from the behavioral sciences. The group did recognize, also, a need for these disciplines to be taught with an emphasis on general education rather than as fields of specialization, except in the cases where these disciplines constituted the areas of specialization.

2. In the discussion of the place of general education in teacher preparation, the group considered various alternatives for curricular placement of the general education requirements. Some of these proposals were:

a. Viewing general education as an *integrative experience*, general education would be placed throughout the program and continued along with professional and/or specialized course work. The requirements of general education would extend into the fifth year program.

b. Viewing general education as an *exploratory experience*, general education would consequently be placed early in the curricular sequence usually occupying the first two years in the teacher education curriculum. The student would concentrate on general education in the first two years; thereafter he would take professional and field of specialization courses.

3. The group examined at length some of the complicated problems entailed in tailoring the demands of general education, professional education, and fields of specialization to fit into a four or five years curriculum pattern. The following are some of the points of view which were expressed as ways of designing the curriculum to meet the renewed demands in the three areas:

a. Some members of the group advocated rejection of the current viewpoint of the three separate areas in teacher education: general, professional and fields of specialization. It was suggested that this separation be removed and a curriculum design be developed that would merge these areas as much as possible. Some of the work in fields of specialization and professional education are certainly a part of the general education pattern: In the discussion on curriculum design the problem of the sequence of the general education program was debated.

b. One group member suggested determining the sequence of general education by the use of some psychological yardstick such as student readiness rather than logical arrangement of courses.

c. Another suggestion for designing the general education program in the teacher education curriculum was the development of courses using as the organizing theme an analysis of the problems faced by the culture. Starting with these problem areas appropriate subject matter from the disciplines would be drawn upon as needed making the organization of the general education program interdisciplinary in nature rather than a series of discrete disciplines.

4. The group concluded that the teacher for the

60's must be a broadly educated person with competence in interpreting and understanding the prevailing cultural patterns. The disciplines of the behavioral sciences and natural sciences assume new importance in the general education programs of all teachers if they are to become truly educated. Recognizing that these disciplines' effectiveness in a general education program are quite dependent upon the way in which they are taught, Group III felt that renewed attention must be given to the redesigning of course content and promotion of effective teaching.

5. Group III's main thesis in discussing some of the current criticism of teacher education programs by scholars who disclaim any responsibility for teacher education is best reflected in a statement recently made by Barnaby C. Keeney, President of Brown University, "Colleges and universities that do not concern themselves with the preparation of good teachers do not deserve good students." The preparation of teachers is not the sole responsibility of the school of education, and the criticism which is being aimed at teacher education encompasses all the disciplines since prospective teachers receive the bulk of their training in the other disciplines. Teacher education must be a high priority concern of every college department.

III. Is it possible to consider seriously an integrated five-year rather than a four-plus-one program in teacher education?

1. The group felt that the profession must look toward five-year preparation programs in light of current and impending demands on teachers. There was a stated preference in the group for requiring degree granting programs rather than accepting an accumulated number of hours for fulfilling the fifth year requirement. The group was not in accord on the pattern the five year program should take. Various alternatives were discussed:

- a. A five year continuous program completed before employment
- b. Four years preparation plus one year study after experience
- c. Three years preparation plus one year field experience followed by one year of study.

2. The greatest need in the area of curriculum design is for some basic research on how skills, understandings and knowledge essential to teacher education can best be communicated. Then the profession must address itself to the task of developing a functional curriculum design based on the research. The group stressed the importance of reassessing the laboratory experience if the profession accepts a five year program. The profession needs to mold carefully the laboratory experience in line with stated purposes which the

laboratory experiences should fulfill—should it be exploratory, integrative, an extension of the course work or a combination of these. All of these purposes doubtlessly have merit but the sequence of the different experiences is primarily decided on a judgmental basis and research is needed to assist in developing a sounder basis for structuring the laboratory experience. Several projects which were re-examining the structuring of laboratory experiences were described:

a. One project is concerned with providing laboratory experience on two different grade levels with two different socio-economic groups of children.

b. The Order of Saint Benedict has been re-examining the laboratory experience in their teacher education program with a view to providing laboratory experience throughout the four-year program. An extended laboratory experience would begin in the sophomore year.

3. The problem of how accreditation agencies should accredit teacher education programs was discussed. As defined by the group the problem is not whether teacher preparation institutions should be accredited, but rather what form and type of accreditation would be most feasible to accomplish the broad purposes of teacher education. Accreditation can take many forms; examinations are in essence a form of accreditation and the feeling was expressed that continued movement in this direction may subvert the value of the accreditation process which in the past has emphasized self study by the institutions. There was some discussion of the problem of accrediting agencies dictating to the teacher preparation institutions. The group concluded that under the present arrangement the institutions have representation on the accrediting agencies, and are in this process exercising direction through their own representatives, which is one of the hallmarks of a profession. If teacher preparation institutions refuse to accept direction and leadership from agencies where they now have representation, then the outlook for the future growth for teacher education as a full-fledged profession is dim indeed.

4. Some members of the group raised the question of whether requiring professional education courses in all master's degree programs works an undue hardship on students who wish to seek advanced degrees in disciplines other than education. A majority of the group concluded that a graduate program should include some professional preparation, especially since most of those who seek advanced degrees will be involved in teaching at some time in their careers. It was noted that TEPS supports a program which includes professional courses (education) in the preparation for advanced degrees on the grounds that such a program represents a balanced approach to curriculum requirements for the graduate student.

In short, Discussion Group III evidenced concern about the changes in teacher education which are going to be made in the 60's. Many of these changes are responses to external pressures: technological innovations, criticisms of existing practices, and the new demands on educational institutions. Specific curricular changes for teacher education are extremely difficult to justify other than on a judgmental basis, due to the lack of curriculum research. The needs of the 60's may best be met by designing some research projects which will cast some light on the major curricular problems which the profession encounters whenever it begins to develop a program: design of the curriculum; relationship of general education, professional education, fields of specialization; the purposes of the laboratory experience; the scope and sequence of laboratory experiences; the selection and organization of content for the total education programs, to name but a few.

GROUP III PARTICIPANTS

Necessary Curriculum Changes

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DISCUSSION GROUP IV

Topic: How Can New Materials and Methods Be Utilized In Teacher Education Programs For the 1960's?

Discussion Leader: Doris Young, Purdue University

*Consultants: Desmond Cook, Purdue University
William Voorhies, Indiana University*

Recorder: Kermit R. Todd, Indiana Central College

In considering the topic "How Can New Materials and Methods Be Utilized in Teacher Education Pro-

grams?" the members of Group IV were confronted with several problems: (1) How do we prepare teachers and administrators who are willing to try new methods and materials? (2) How can teacher training institutions work more effectively with the public schools in using new methods and materials? (3) What are some of the newer methods and materials being used today? (4) What change will the new materials and methods make in the present instructional program? (5) How is the cost of these programs to be met?

With respect to the problem of preparing teachers and administrators who would be more willing to try new methods and materials, several suggestions were made. It was agreed that teacher training institutions must have all of the newer materials available and that the students must be made acquainted with them. The attitude of the college teacher toward research and change was judged to be most important in developing an openness of mind on the part of student teachers. To make both the public school teacher and the college teacher more aware of this problem, a program of inter-visitation was suggested. The college teacher may help by in service training, workshops, conferences, etc., and the public school teacher and administrator may bring themselves up to date by additional courses dealing with the newer methods and materials.

Some of the newer methods of teaching under discussion were closed circuit television, video tape, airborne television and teaching machines. William T. Voorhies of the Education Department at Indiana University explained the use of closed circuit television in teaching such courses as: Introduction To Teaching, Psychology, Methods and Curriculum Courses, Child Development and Guidance. A classroom in the University School is equipped with stationary television cameras which cover all areas of the room. Likewise a viewing room is located in the Education Building, giving education classes an opportunity to observe without being seen. A technical director stationed in a glass enclosed control room can talk by earphone to the college instructor and class in the viewing room or to the teacher of the class under observation. It was pointed out that live observation is still preferred by student teachers.

The video tape makes it possible to take a tape of a student teacher conducting a class whereby he can see and hear himself. The tape is also a valuable means of assisting the supervising teacher to observe student teachers. A library of tapes may be built up and each student teacher can view at the level in which he is interested.

Some of the apparent advantages and disadvantages of airborne television were suggested by various mem-

bers of the group. The advantage of having master teachers present the materials was pointed out and the ability to use the best materials available was recognized. Viewing in large groups was also presented as an asset to this method of instruction. Some doubts were raised about the program: fear of committing the teacher and student to a set program and not giving enough time to group discussion and individual questions; difficulty of fitting television into the rest of the program without loss in other areas; fear of setting too fast a pace for all to keep up; danger of demonstrating and using a limited number of teaching methods; such as lecture method; and fear that television is too much of a passive program. It was felt that the teacher of an airborne class would have to use a variety of methods and materials and that the classroom teachers would have to be given great flexibility to complete the job.

Some of the more pertinent facts about teaching machines and their use was discussed by Desmond Cook of Purdue University. Teaching machines with planned programs in several subject areas are now able to individualize instruction and after the machines have been purchased, the cost is about the same as for textbooks. Each pupil progresses at his own rate and knows how he is doing at each step. Although automatic instruction has only been in use for five years and practically no research has been done, the schools using these devices have reported interest and success. Several of the members of the group were concerned about teaching attitudes, values and appreciation with machines.

Some of the implications of these new devices as discussed by the group were: (1) It will cause a more careful examination of our objectives and the methods of obtaining these objectives than has been done previously. (2) Autoinstruction will change the teacher into more of a professional than he now is. (3) This type of instruction will demand more of the teachers in the way of education, experience and professional growth. (4) New types of instructional systems will evolve to be used along with mass methods and conventional methods. (5) To use any of the newer methods of instruction we will need to know more about how learning takes place. (6) We must orient student teachers to know about and to use all the newer materials and methods of teaching.

The following summarization was made by the group:

1. Some of the new methods and materials have tremendous potential in teacher education.
2. Pre-service experiences must include the effective use and evaluation of new teaching methods and materials.

3. Teacher training and the use of new materials and methods are the cooperative task of all departments.
4. Curriculum laboratories should be set up in the colleges and universities.
5. An adjustment of the time schedule, in college classes as well as in elementary and secondary schools, will have to be made to make possible the effective use of some of the new teaching methods.
6. The cost of all new methods ultimately will have to be provided by the school corporation.

GROUP IV PARTICIPANTS

New Materials of Instruction

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Selective Admission And Retention Today

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• IT IS ALMOST needless to say that one of our most pressing problems in modern teacher education is the improvement of our selective admissions and retention policies and practices. Witness the fact that NCATE teams frequently find institutions failing to qualify on the standard relating to this subject.

Any consideration of selectivity in teacher education is colored by our thinking and decisions about a variety of rather broad factors: (1) The continuing and pressing teacher shortage in America; (2) The extension and expansion of education, both in terms of knowledge and the length of time spent in formal education; (3) Cultural or societal images of the teacher; (4) Dawning efforts to "professionalize" ourselves; (5) Difficulties inherent in defining and measuring teacher effectiveness with any reasonable degree of reliability and validity.

Despite these problems increasingly effective programs of selective admissions and retention are being developed. Customarily these programs cite a series of characteristics we hope to find in each prospective teacher. (1) He must be bright. That is to say he must be sufficiently academically apt, and have a degree of social intelligence. (2) He must achieve well, particularly in his collegiate curricular experiences. Facetiously, we might remark that currently it appears as if a prospective teacher must be "well-rounded in depth."

(3) He must evidence good character in his relationships with others. (4) He must display a personality supposedly effective for teaching. (5) He must demonstrate good mental and physical health and vigor. (6) He must communicate not only effectively, but well. (7) He must have sound motives for teaching.

Above all, the prospective teacher's record should reflect the above characteristics. This is most important in any program of selective admissions and retention.

Despite our convictions about the above characteristics an overview of selection programs today indicates that there doesn't appear to be any common program and practices. Both in the literature and in various pronouncements at conventions an increasing attitude is appearing which might be summarized as a "get tough policy." At the same time we need to realize that institutions like those represented here select prospective teachers *from among those who come to us*. It is also apparent that we tend to miss recording and evaluating outside class activities despite the fact that research on student attitudes and values indicates that the total education one receives prior to graduation from college is vitally influenced by experiences outside of formal class or course work.

Any consideration of selective admissions works back toward the basic assumption that the decision to teach is affected by good teaching in the elementary and secondary schools as well as in the colleges. This

means to us that we teachers must demonstrate in our professional conduct within the classroom those qualities which we find most desirable for effective teaching. Aggressive recruiting and wide advertising may help in getting capable students to enter teacher education programs, but the models or images we set in our daily work with students will, in the long run, probably have a greater impact. It must always be realized that self-selection is an operative principle and where teaching is held in relatively high esteem larger numbers of highly qualified potential teachers seem to come into the program.

Nationally, where do we now stand and where do we seem to be going in terms of teacher selection? A few factors and figures immediately come to mind. (1) Probably 50% or less of the colleges preparing teachers have effectively functioning teacher education selective admissions and retention programs. (2) Such programs appear to be increasingly differentiated from the general student's normal progression through college. One might ask why this is so. Immediately consideration must be given to the changing roles of what used to be teachers colleges as well as consideration of societal emphases on the importance of education coupled with our profession's efforts to improve. (3) The impact of the National Council for Accreditation of Teacher Education and the reciprocal agreements among states on matters of Teacher Certification. These agreements can and should have a marked effect on teacher selection programs. (4) The work of the National Commission on Teacher Education and Professional Standards in its New Horizons project wherein a strong plank has been developed to work toward the elimination of the extremely potentially unfit teacher, to increase the use of various measurement devices for teacher selection and retention, and to research into those factors which make a professional teacher. (5) A growing awareness of those studies which are pointing us some sharp institutional differences in colleges and universities where teachers are educated. I refer particularly to the Educational Testing Service's original studies while developing the Teacher Education Examination Program and to such research as T.R. McConnell's studies at the University of California. (6) Studies of persistence at the University of Minnesota and other places. (7) Ruth Stout's study reported in the *Journal of Teacher Education*, September and December, 1957, and a follow-up by Edson and Davies in the *Journal of Teacher Education* for September, 1960.

Incidentally, we might mention here that Edson and Davies noted some changes in selectivity in teacher education when they conducted their survey following up Stout's earlier work: (a) The opinions of college personnel seem to have shifted more than the actual

teacher selection practices. (b) There seems to be more emphasis on academic achievement. (c) More emphasis on English usage. (d) Increased use of faculty committees in the selection process. (e) A decreasing use of staff members specifically trained for and assigned to student personnel work. (f) A relatively strong development in teacher selection processes particularly at the point of entrance to student teaching. (g) In Minnesota more graduates of medium and low selectivity colleges teach within the state while all three groups of low, medium and high selectivity colleges prepare about the same proportion of teacher graduates.

As we consider teacher selection programs in operation today a series of hypothetical quotes denote some attitudes. "We selectively admit those who apply." "We must eliminate six to ten students yearly in order to have a good record." "We must consider where our graduates come from and where they go to teach." "Set standards for admission to teacher education higher than those which are utilized in the college of arts and sciences." These hypothetical statements indicate some of the problems with which we contend and they also indicate some aspects of the programs of teacher selection which are evolving.

Above all we must consider the individual as we move toward programs of higher quality and greater quantity. This is mandatory. There is an urgent need to clarify our purposes and programs in such a way that we can handle in a harmonious manner the dichotomy of education for self-help, self-direction, self-realization versus selective admissions of only those who are highly qualified now.

We would then propose that institutions like ours evolve a five point program of selective admissions and retention. This would begin at the stage of admission to college. We recognize that records prior to the entrance to college must also be utilized and that an early dedication to teach, participation in future teacher's clubs, and the like are important. The second step would be formal admission to teacher education. This would fall customarily at the end of the second year of collegiate education. Our third step in the program would be formal admission to student teaching. Finally, graduation and temporary certification to teach generally winds up the pre-service education of the teacher. The last step in our hypothetical program is that of follow-up which would include both observation and the recorded judgments of one's colleagues in teaching, permanent licensure, graduate study and probably achievement of at least a master's degree or its equivalent.

This hypothetical program will involve many per-
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Twelfth Annual Conference for Supervising Teachers

INDIANA STATE COLLEGE

March 17, 1961

Conference Theme: New Ideas in Student Teaching

PRINCIPAL ADDRESS

Don Davies

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Research and Student Teaching

• THERE IS a research bandwagon that is rolling and picking up momentum. There is probably no topic that is more popular or respectable today in education circles. It's as safe to be for research as it is to be in favor of patriotism and individual differences. Even those of us who are primarily concerned with teacher education and student teaching have become infected with the virus.

There are several factors that have created our blossoming interest in research. I shall mention just three of them. First, we are faced with an awesome array of complex and important problems about which we are called to make decisions. Many of our most cherished ideas and practices are being sharply challenged by critics outside of our own ranks and by thoughtful members of our own group. As we have attempted to make wise decisions and to respond intelligently and positively to criticism, we have become aware of how little solid evidence there is relating to teacher education and laboratory experiences. And we have become embarrassed, I submit, both by the lack of evidence, and by the dubious quality of much of what we have called research in the past.

A second factor contributing to the spurt of interest in research is the availability of money from the Federal government and private foundations. This kind of financial support has made it possible for colleges and

school systems to undertake some things that would have been difficult or impossible otherwise. As an aside, I feel that I must point out that such increased support can be a mixed blessing. There clearly are dangers if our decisions about what is important to study and about the values that should underlie our educational programs are influenced unduly by the existence of money for research to which strings are tied. The availability of money for certain purposes should not become the tail that wags the educational dog. Affluence in the form of an impressive string of research grants should not become a primary goal of colleges and universities. But, let me remind you that the total amount spent for all educational research is very small compared to what is spent for research in industry and agriculture. For example, in 1957 General Motors spent more money developing a new transmission for their automobiles than was spent during that same year for all educational research at all levels.

A third factor contributing to the heightened interest in research has been the growing recognition that few if any individuals in education combine in one person all the understanding and skill necessary to conduct the kind of research which is required today. The idea has become generally accepted that a team approach is needed. We need teachers in schools and colleges who are skillful in identifying the problems that need study; we need philosophers and theoreticians who can set problems in proper context and provide value yard-

sticks against which the results of research can be measured; we need experts in research design; we need statisticians; we need technicians who will be able to utilize mechanical and electronic aids to analysis; and we need skillful administrators who can facilitate the work of all of these others. When this notion of a team approach is accepted, then those of us who lack certain skills need no longer shrink from research endeavors. For example, the fact that I do not know how to compute a standard deviation is no longer a valid excuse for my not making a contribution to my field through research. I would not want to be interpreted as saying that we can now be content to do amateurish research, but rather that some of us who are amateurs in some areas can team with others who are not in order to carry on the kind of research that is clearly needed to assist us in making the important decisions that we make in teacher education.

My presentation today will deal with two somewhat separate aspects of research in teacher education.

First, I shall describe a research project which we conducted at the University of Minnesota; and

Second, I shall address myself to the question, How can we develop a research-orientation in our students in teacher education programs?

These two parts of my presentation illustrate two of the most basic needs that I feel we have in teacher education—the need for experimental research and the need to prepare teachers who have a positive attitude and orientation toward research, who approach teaching experimentally.

First, I turn to the question of experimental research.

For many years some of the people interested in teacher education have clamored for experimental research relating to student teaching and have pointed with alarm to the fact that nearly all of our research has been of a descriptive nature and that a substantial portion of it has been nothing more than sending out a questionnaire and tabulating the results.

For many years *other* people interested in teacher education have said, "Let's stop talking about experimental research in student teaching; it can't be done; there are too many variables, too many uncontrollable factors." Or they have said, "It might be possible to design an experimental study, but administrators, and supervising teachers, and student teachers are not going to be willing to participate. They'll be frightened and hostile, and unwilling to cooperate if we talk about randomization, statistical tests, and experimental design."

For many years still others interested in teacher education have said, "What we should be concerned about

is improving our procedures, doing a better job with our student teachers. All this talk about experimental research will simply divert us from our primary jobs. We don't see how research will help us in the jobs that we are doing; let's leave research to the researchers and statisticians.

So, we have had a continuous and sometimes heated dialog among exponents of the three points of view—on the one side a persistent call for experimental research about student teaching; on another side, those who have said that experimental research about student teaching can't be done or that teachers and administrators won't put up with it; and on still another side have been those who don't believe that experimental research, even if we could do it, would make little difference anyway in our student teaching programs, or in the way we work with student teachers.

About three years ago several of us at the University of Minnesota became weary of this kind of fruitless dialog, a dialog in which none of the parties was changing its argument or its position, and no one had any real evidence to support his opinion.

We planned and designed an experimental research study and obtained financial assistance from the Co-operative Research Program of the United States Office of Education. We hoped that one of the by-products of our project—quite apart from the specific findings—would be answers to questions such as these:

1. Is it possible to conduct significant, experimental research about student teaching?
2. Is it possible for college faculty, school administrators, classroom teachers and student teachers to work effectively and harmoniously in a joint research project?
3. Is it possible, through research, to discover useful ideas that can lead to improvement of our practices, to improvement of the quality of the student teaching experience for prospective teachers?

Our first step was to survey the literature of student teaching to find what experimental research had been done previously. We found none.

Our second step was to determine the problems and concerns that seemed most significant for study.

We formulated four general questions, to which we would seek answers:—

1. What is the relationship between certain data about students collected at the time of admission to the College of Education and the observed behavior of these students when they become student teachers?
2. What is the relationship between the behavior of student teachers in the classroom and a) the student teacher's preference of grade level, b) ex-

perience (whether the student is in the first or second quarter of student teacher), and c) the classroom situation to which the student is assigned?

3. What is the relationship between ratings of classroom behavior of student teachers made by experienced student teaching supervisors using their established procedures, and ratings made by observers (who were not supervisors) using other procedures?
4. What are the activities of student teachers in the classroom? What do they teach and, how do pupils respond to them?

With these four basic questions in mind, the research team designed a study in which the subjects were 36 College of Education senior women who were preparing to be elementary school teachers and who were enrolled in our regular four-year elementary teacher education program. The population of 36 women was selected because they had previously been the subjects of a study of the admissions review and there was an opportunity to relate the interview study and the student teaching study. We determined statistically that these students were representative of our total population of women preparing to be elementary student teachers.

The fact that the student teachers were all of the same sex and all had a common background of general and professional education reduced two important sources of variation.

Since in our elementary education program students typically have two quarters of student teaching, on a half-day basis, with one quarter in a primary grade and one quarter in an intermediate grade, we had two additional sources of variation concerning the student teachers themselves to consider—grade level preference and experience, that is, whether they are in their first quarter as opposed to their second quarter of student teaching. These variations could affect the classroom behavior observed. These two factors—grade level preference and experience—were incorporated into the research design.

Turning to the question of assignment, we decided to use the regular corps of supervising teachers in the elementary schools of Minneapolis and St. Paul, but to assign the students according to the requirements of the experimental design—within four geographic areas. These areas were selected to take account of socio-economic differences among schools. We ran statistical tests to be certain that we had insured against possible socio-economic bias.

Before the assignments were made, the sample of student teachers was stratified into two groups: those who stated a preference for teaching the upper three

grade, 4 through 6; and those who stated a preference for teaching the three lower grades, 1, 2, 3. Each of the students in a preference group was randomly assigned to one of two orders of teaching experience. For example, among those who preferred upper grades, half were assigned to upper grades for the first quarter and to lower grades the second quarter, while the other half was assigned to a lower grade for the first quarter and an upper grade for the second quarter. The particular classroom within a geographical area to which students were assigned was chosen randomly.

The randomization of assignments within geographical areas by grade level preference was an essential feature of the study for it preserved the experimental nature of the investigation.

Observational data were gathered by a group of observers, who were given special training to assure reliability in the use of the data-gathering instruments. These observers, who did not have experience as elementary school teachers or as observers, were selected because of their background in psychology and the behavioral sciences and their sensitivity to the dynamics of human behavior.

Each of the five observers visited each student teacher once during each quarter. On each visit to a classroom, they observed for a total of 30 minutes, taking five-minute time-samplings of the student teacher's behavior. The observers used two instruments to sample the student teacher's behavior. The first was an adaptation of an observation schedule developed by Medley and Mitzel of the City Colleges of New York. This schedule provided a short-hand method for checking a number of pupil behaviors and teacher activities. The instrument permitted the observer to check the subject that was taught, the variety of materials that was used, some of the methods the student teacher employed, such as group work or individual assignments. Pupil responses were recorded in categories that could be classified as receptive and cooperative or antagonistic and disruptive.

The second observation device used was that system developed by Professor Ned Flanders at the University of Minnesota, which he calls "interaction analysis." This system provides a picture of the teacher's verbal behavior, and enables a classification of this behavior into two general categories: dominative or integrative (Flanders uses the term *direct influence* in place of *dominative behavior*, and *indirect influence* in place of *integrative behavior*).

A word of definition—dominative behavior by the student teacher here means behavior which is characterized by rigidity and inflexibility of purpose, which

tends to restrict the freedom of response of pupils, which focuses the learner's attention on the teacher as the source of ideas, information, and authority.

Integrative behavior, on the other hand, is characterized by setting broad and flexible structure in the classroom, provision for differentiation of tasks, the seeking of common purposes in pupil difference. The integrative teacher is one whose relationship with students is characterized by (1) support, encouragement, and praise, (2) freedom of student expression, (3) attention to student feelings, (4) encouragement of different approach, and (5) promotion of acceptance of others.

One more important item of procedure must be mentioned. The student teachers in the study were assigned to our regular University student teaching supervisors. These supervisors, along with the trained observers, were asked to use a special rating sheet for each student teacher. This rating sheet dealt with only two aspects of student teaching—creativity and resourceful teaching, and interpersonal relations. The use of this instrument enabled us to make certain kinds of comparison between the observers and our regular student teaching supervisors.

After the preliminary design was completed, the investigators (Roger E. Wilk, William H. Edson, Don Davies, and Naomi C. Chase) approached public school administrators in Minneapolis and St. Paul and gained their approval for the undertaking. Several means were used to enlist the cooperation of supervising teachers. The most effective was a series of special orientation meetings. These meetings gave the teachers an opportunity to hear a first-hand account of the project, to have their questions answered—and their anxieties lessened. We also held an orientation meeting for the student teachers who were the subjects in the study in which we enlisted their cooperation and explained the purposes of the research project.

With one or two minor exceptions we had the full cooperation of the supervising teachers and the student teachers throughout the two quarters of the project.

And now, let me talk with you briefly about a few of the most interesting findings.

The first of the four major questions which we asked had to do with the relationship between certain data gathered at the time the students were admitted to the College of Education and the observed behavior of these students when they became student teachers.

I mention just one finding in this regard. We found a statistically significant relationship between integrative behavior by the student teachers in their classroom and their scores on the Minnesota Teacher Attitude In-

ventory and their sophomore grade point average. In other words, those students with high MTAI scores and with high grade point averages tended to be more integrative in their classroom behavior—that is, they tended to be more aware and accepting of individual differences, more flexible in approach, and so on.

We found no statistically significant relationship between student teaching behavior and other predictors such as high school rank, score on Miller Analogies, counselor's ratings.

The second general question which we set out to answer had to do with the relationship between behavior of student teachers in the classroom and student's preference of grade level, grade level of assignment, and quarter.

Here there are several findings that seem to be interesting and to have implications for our program of teacher education.

There were no significant differences, with one exception, relating to preference of grade level. The one exception was that those students who said they preferred lower grades gave more emphasis to verbal activities than those students who said they preferred upper grades. The fact that we found only one difference, according to grade level preference, may suggest that we have given more importance than might be warranted to grade level preference when determining the student teacher's first assignment.

There were some striking differences in behavior between students when they were in the lower grades as compared to when the same students were in upper grades. Remember, each student had experience in both lower and upper grades.

For example:

When in the upper grades, student teachers . . .

- gave more positive, supportive attention to individual pupils
- used a wider variety of teacher and pupil learning materials
- created a better classroom climate
- gave more emphasis to verbal materials and activities.

When in the lower grades, student teachers . . .

- talked more
- evidenced more domineering behavior (that is, behavior that restricted pupil freedom to respond).

In other words, we found quite unexpected difference in the composite picture of the upper grade class-

room. We really don't know how to explain this finding. We have speculated that perhaps the difference in behavior comes from student teachers' perception of primary age children and the role of the primary teacher. Is it possible that our student teachers see primary teaching as a type of kindly but firm mothering, or baby-sitting? We aren't at all sure about this, and it may be some of you who know a great deal more about elementary school teaching than I do, will be able to explain the situation to us. Clearly we need to know more than we presently do about student teachers' perceptions, about the "set" with which they come to student teaching, and we need to determine ways by which perceptions and "set" can be modified. At any rate, we are quite sure that we need to find the answer and then take appropriate action in our education courses and in student teaching.

The next finding has to do with differences between first and second quarter of student teaching. Does the student teacher behave differently during the first quarter from the way she behaves during the second when she has had more experience? Our answer seems to be a tentative and partial, "Yes, for we found that

1. Students during their second quarter used a significantly wider variety of activities in directing the class as a group, and
2. Students during their second quarter were significantly more integrative in their behavior.

We were pleased to know that the student teaching experience was producing some change of behavior in our students—in a direction that we felt was desirable.

When we compared ratings made by observers and those made by supervisors, we found:

1. Supervisors tended to rate student teachers more favorably than the observers and there was more variability—more range from high to low—in the supervisors' group judgments than in the observers'
2. A substantial agreement—a positive correlation—significant at the 1% level of confidence—between observers' and supervisors' ratings.
3. However, there still were some important discrepancies. . . for example, for 7 out of 36 students on the creativity items on the rating scale there were serious discrepancies between observers and supervisors . . . and for 7 students out of 36, there were equally serious discrepancies between the two groups of raters on "the general rating of success in student teaching." A careful analysis of the data revealed that these discrepancies were accounted for largely by two of the supervisors.

4. The correlation between observers' ratings of success in student teaching and the letter grades given by supervisors was .52, which was significant but not exceptionally high. Oddly enough, the generalized rating of "success in student teaching" given by the supervisors had a correlation of only .77 with the letter grades awarded by these same supervisors. Here may be ammunition for those of you who question the validity of letter grades in student teaching.

A further analysis of the differences between observers and supervisors has led us to ask this question: Are there two kinds of separate and somewhat incompatible reasons for observing . . .

1. observing for evaluation, for measurement
2. observing as it is related to instructional and counseling purposes?

Perhaps one person should not be called upon to do both. Perhaps we need a person trained one way to observe for assessment and a person trained another way for instruction and counseling.

Our study suggests one possibility for further discussion, and that is, if assessment is our principal purpose for observing student teachers, we will achieve greater reliability and validity of rating if three or four or five supervisors were to visit each student teacher once rather than if one supervisor were to visit a student teacher several times.

Finally, we asked the questions: What are the activities of student teachers in the classroom? What do they teach? How do pupils respond to them?

We found that student teachers taught reading most often followed by social studies. In fact, one half of the total observations recorded the student teachers teaching reading; and one-third of the observations found them teaching social studies. Only infrequently were they teaching art, music, and science. In fact, science was being taught in only one out of every 10 visits.

These findings sent us scurrying to re-examine our student teaching program asking the question, How can we insure that our students have a reasonable balance of teaching experience among the various subjects? We have asked ourselves, too, whether or not our commitment to the idea that student teachers should begin with the subject in which they feel most comfortable, is leading to a heavy emphasis on reading experiences, and a serious deficiency in arithmetic and science experiences.

Second, we found that in most observations the student teacher was active in directing the class and

the pupils were, more or less, passive participants. In over half of the observations student teachers were found to be talking to pupils in a manner resembling a formal lecture. Very often student teachers wrote on the blackboard as they presented material, but they only occasionally used maps and charts and other learning aids.

Furthermore, in nearly all of the observations, student teachers spent some time talking to the class about some topic not directly related to the subject-matter—topics such as social behavior, classroom conduct, or the school patrol.

In over half of the visits, student teachers were observed praising good work and assisting individuals. But in 80 per cent of the cases they were critical or sarcastic about pupil behavior not directly related to the learning situation. It was not uncommon to find the student teacher warning or threatening her pupils or interrupting them in their presentations or questions. It is difficult to judge what value should be placed on these kinds of findings, but we have been prompted to raise some questions.

It is certainly important that teachers exercise control over their pupils. Control does involve criticism of behavior, ignoring some questions, and interrupting a pupil on occasion. However, the questions are: How much of this should occur in the classroom? How can student teachers be helped to recognize their own behavior and assess the influence that this behavior has on children's attitudes and learning? How can we help our student teachers control their behavior in the classroom to serve their instructional objectives? These questions offer serious challenges to anyone interested in student teaching supervision.

One of the most surprising findings, which was alluded to earlier, bears repeating here. Student teachers were more helpful, patient, and supportive of their pupil when they were teaching in the upper grades; in the lower grades they tended to be more critical, to provide less praise, and to give less help to individual pupils.

Why should this be? I must leave that question with you to ponder.

Another of our findings was that student teachers were forming groups for instructional purposes in only 13% of the visits. This means that the student teachers, with only a few exceptions, were not utilizing on-the-spot group methods as a part of their instructional procedures. It is important to note there that the opportunity for a student teacher to use group techniques probably varied widely with the nature of the teaching situation she was in and the point-of-view of her super-

vising teacher about grouping. Nevertheless, the results of our study have suggested that we need to provide more experience for our students in forming and utilizing instructional groups before they assume responsibility for their own classrooms as regular teachers. We need to look further at the question of whether grouping is a technique that should be avoided by the novice and used primarily by the master teacher. And we need to give our students more experience in handling the transition from total class activity to groups, and from activity to activity.

Turning to the question of pupils' responses to student teachers . . . we discovered a clear relationship between method and behavior. When student teachers employed a variety of materials, there was less disruptive pupil behavior. When the student teachers were supportive, encouraging, and helpful—that is, more integrative in their classroom behavior—there were fewer disruptive pupil behavior incidents observed . . .

We discovered no relationship between disruptive behavior by pupils and the grade level assignment, preference of grade level, or quarter of student teaching. This leads us directly to the notion that it is the activities of the individual teacher—her behavior in the classroom—that is the most significant determinant of pupil behavior in the classroom.

One final item from our findings . . .

We found a significant correlation (positive .58) between a measure of classroom emotional climate and the number of integrative or indirect influence comments made by student teachers; and a negative correlation of -0.34 between the classroom emotional climate and the amount of dominative behavior or direct influence of the student teachers.

Beyond our specific findings . . . we are convinced now that it is possible to conduct significant experimental research about student teaching; that it is possible for college faculty and school teachers and administrators and teachers to work together effectively and harmoniously in a joint research project; and third, it is possible through experimental research to discover useful ideas that can lead to the improvement of our practices, to the improvement of the student teaching experience for prospective teachers. It is obvious that our research has not given us easy answers to all of our questions—in fact, we have more questions now than when we started—but it is real progress, when the key questions are identified.

All of this information about our Minnesota study has been presented primarily to illustrate the importance of experimental research in teacher education.

I shall turn now to the second part of my presentation and ask the question, "How can we develop in our undergraduate students an interest in research and an experimental attitude toward educational problems?" It seems to me that this task is every bit as important as the task of doing experimental research. Research, however sound and rigorously designed it may be, will be of little value unless teachers and administrators at all levels are positively-oriented toward making applications of research-findings.

Professor Florence Stratemeyer of Teachers College, Columbia University, spoke about this problem last year at the national AST conference in Chicago. She pointed out that teacher education institutions should prepare teachers who will have an experimental attitude toward their work—teachers who will regard all of their classroom work as a continuous series of immediate and long-range experiments in pupil learning, who will view their ideas and practices with a questioning eye and mind, who will be less rigid and more tentative in their approach to educational problems. She pointed out also that concepts, skills, and attitudes basic to conducting research and using research findings can be taught and learned in the same way that other concepts, skills, and attitudes can be taught and learned.

What then can we do to insure an abundant supply of teachers with a research-orientation?

1. *All college teachers in teacher education programs—and supervising teachers in laboratory schools and cooperating public schools—can demonstrate in their own teaching a research orientation. This means simply that if we advocate a research orientation to our college students, we must practice what we preach. We all know that the old "do-as-I-say-but-not-as-I-do" approach is fatally ineffective.*

There is some striking experimental evidence that relates to this point. Professor Paul Torrance¹ carried out a study for the United States Air Force four or five years ago in which he explored the influence of supervisors' attitudes on 427 air crewmen during all-day field exercise. During the field exercise the air crewmen were asked to eat bars of field ration instead of their normal diet. The field ration, called pemmican, had a somewhat unusual and not entirely pleasant taste and texture. The crewmen were divided into groups of 6-12, and each group assigned to the continuing supervision of an instructor. The trainees were subjected to rather intensive influences from the instructors, all of whom

were expected to express positive attitudes toward the field ration—the food bar called pemmican. A careful study was made to determine the number of bars eaten, the number of times that the men reported that they had been "made sick" by eating the bars, and the expressed attitudes of the men toward the bars. An instrument was also developed to determine how the crewmen perceived their instructors' attitudes toward the bars. Another instrument was used to determine the instructors' actual attitudes toward the field ration—how they really felt about it, even though they were all asked to express very positive feelings to the men about the bars.

The findings are interesting. There was no significant relationship between the number of bars eaten by the men, or the occurrence of being "made sick" and the perceived instructor-attitude—the way the men said they thought the instructor felt. However, there was a significant relationship between the instructors' real attitudes and the number of bars consumed and the occurrence of being "made sick." In other words, the instructors' real attitudes showed through their verbal statements of the point that these real attitudes of the instructors influenced the behavior of the men. Professor Torrance concluded that teacher education institutions need to seek to develop in students those attitudes which teachers are expected to develop in their pupils; and that administrators who ask teachers to develop in their pupils certain attitudes should first seek to develop these attitudes in teachers. From the results of the air crewman study, it would seem that even if teachers or supervisors say the "right words" and the students say that they perceive their teachers or supervisors as having favorable attitudes, the real attitudes of the teacher or supervisor are likely to "show through" and to affect behavior and emotional reactions.

2. *All college teachers—again including supervising teachers—can encourage prospective teachers in college classes and in student teaching and other laboratory experiences to raise questions about ideas and practices, to set up hypotheses, and to test these hypotheses—sometimes by going to the published results of research done by others, sometimes gathering evidence first-hand.*

For example, let us take the case of a student teacher in a business class. She becomes concerned about the progress that some of the students are making in mastering typewriting skills. Her supervising teacher and college supervisor encourage her to raise questions about the methods of practice which are being used in the class. They help her phrase a tentative hypothesis about the relative effectiveness of distributed practice as opposed to more intensive practice. They direct her to appropriate studies about skill-learning and to other

¹E. Paul Torrance, "Teacher Attitude and Pupil Perception." *Journal of Teacher Education*, XI: 97-102, March, 1960.

studies relating directly to the teaching of typewriting skills. They also make it possible for her to test out two different approaches in two classes of the high school. The school district's research director is called in for a brief conference to assist with the design of her informal study. As an alternative plan, the same student teacher could be helped to take an experimental study of the same problem designed and carried out by an experienced researcher and re-do the study in the student teaching situation.

These kinds of supervisory approaches would seem to have far greater potential for developing a research orientation on the part of the prospective teacher than if the supervising teacher and college supervisory has reacted defensively to the student's questioning attitude or if the supervising teacher had said, "I have used this method of practice in teaching typewriting for years. It has always worked for me. Once you're on your own you can try something different."

Another illustration of what we can do in student teaching can be found in a small-scale project we are conducting at the University of Minnesota. One of our supervisors has become strongly interested in finding ways to encourage students to pose alternative solutions to educational problems, evaluate these alternatives, test one or more in practice—rather than to seek a single answer or unchanging formula. She has designed a small-scale experimental study, in which our off-campus student teachers in language arts, social studies, and core curriculum are randomly assigned to four groups, each with a different University supervisor. The students were given several creativity and personality tests before and after their student teaching assignment.

In one of these four groups, the experimental group, the supervisor is focusing most of her efforts on helping her student teachers identify the range of alternatives present in every educational problem they face—she is attempting to give them the security and the skill needed to be creative in their approach to these problems.

We hope to discover what changes, if any, can be brought about in a short period of time—ten weeks—and to discover what impact the supervisory approach has in the experimental group. The experiment, which started fall quarter, was repeated winter quarter, and will be run again spring quarter.

3. *All college teachers and supervising teachers can contribute to the development of the prospective teacher's research orientation by referring to experimental studies appropriate to work in college classes or in student teaching or other laboratory experiences.*

In this regard, it is obvious that the college student will need to be given help in interpreting and evaluat-

ing research reports. Those working with him must be especially wary of giving the prospective teacher the impression that all educational problems can be swiftly and painlessly washed away simply by going to the library and reading a few research reports or by doing a quickie-action research project in the classroom. The concept we need to teach—and to demonstrate—is not that research is the end-and-all, a panacea, but rather that it is a useful tool to be used with intelligence and wisdom, in making educational decisions.

4. *College teachers and the faculties of laboratory schools and cooperating public schools can encourage college students to become involved—either as observers or as assistants—in current research endeavors of the college teachers or school faculties.*

For example, a supervising teacher who is participating in a district-wide study of spelling can take her student teacher with her to a meeting of the research team; can let him examine the evaluative instruments being used in the study; can talk to the student about the design and procedures and about the problems and pitfalls. The same supervising teacher, if it is appropriate, might allow the student teacher to participate actively in some aspect of the study.

Or, a college teacher of educational psychology who is himself working on the relationship between reading ability and achievement in school, can talk to the students in his classes about this research and its implications—and can demonstrate by giving them a front-row seat in the process and some of the joys and difficulties of the research endeavor.

5. *Teacher preparing institutions can provide opportunities for some students to carry on systematic research projects as a part of student teaching or other laboratory experiences.*

As an example of how this might be done, I can cite a plan which will begin next year in my own institution. The College of Education and the Institute of Technology have recently developed a joint five-year pre-service program of preparation for teachers of mathematics, chemistry, and physics. At the end of the five-years, the successful student is awarded a Bachelor of Science degree in his field of specialization and a Master of Education degree. Student teaching and other professional laboratory experiences are provided in the third and fourth year of the program. During the fifth year the student undertakes a full-quarter, full-time internship, an important part of which will be the planning and carrying out a systematic study of some teaching problem. A course in research methods and design will either precede or accompany this internship. It's not possible, of course, to predict the effectiveness of

this plan—but it does represent a promising and intriguing approach to the development of a research orientation on the part of the prospective teacher.

It must be said that the practicality of the suggestion for actually carrying on research as a part of student teaching rests on the accessibility of willing cooperating public schools or campus laboratory school and supervising teachers, teachers who themselves have a research orientation.

6. *By being the subjects of experimental research, themselves, student teachers can be helped to develop positive attitudes toward research.*

The student teaching study described (in detail) earlier provides us with an illustration. We made an effort to help students in this study understand the purposes and the importance of the research of which they were a part; our supervisors worked with the student teachers in an informal way to help them recognize the relationship that can exist between research and decision-making. We prepared a summary of procedures and findings for participants—the student teachers themselves received this report.

Running through all six of the suggestions that I have made has been an important assumption—that the area of research can no longer be deferred entirely to the in-service and graduate school level; beginnings should and can be made before the prospective teacher begins to teach. In Dr. Stratemeyer's words:

"The undergraduate cannot achieve the competence required for designing basic research. He can, however, gain the initial understandings and skills (1) which acquaint him with the major sources that report research, (2) which are basic to intelligent reading and critical interpretation of reports, (3) which make it possible for the student to use action research, setting up and gathering evidence regarding hypotheses suggested by work in the classroom and school situation, and (4) which make it possible for him to re-do in a new situation a study that had been carried on by an experienced researcher."

The suggestions have considerable merit, I believe, as they are designed to get at one of the most persistent blocks to educational progress.

This block is the gulf of misunderstanding and distrust that exists between the "theoretician" and the "practitioner." Approaches such as these I have mentioned can help to bridge this gulf—by building positive attitudes in prospective teachers toward the contribution of research and of educational theory to practical educational problems. The suggestions have further merit, I believe, because they go far beyond simply "telling" students about research and its importance. The strength of the suggested approaches is that they call for involvement, participation, and demonstration.

Basically, I have tried to bring two messages to you today. The first is that we need experimental research relating to student teaching—research that may lead us to ideas and information that will strengthen our practices and will give us a more solid base on which to make the important decisions about student teaching that we must make.

The second is that we need to find ways to develop a research-orientation in our own undergraduate students, so that we have an increasing number of classroom teachers who will have the skill and the willingness to participate with colleges in research undertakings, and to study and use the findings of research done by others, and to approach their own teaching with an experimental and inquiring attitude.

If we can make progress on both of these ideas, each of us, whether we are a classroom teacher or administrator in an elementary or secondary school, or a teacher or administrator in a college, can make a substantial contribution to the improvement of the education of teachers.

I have not answered for you one of the very important questions that I raised when I began. I suggested that you ask: What is the most useful contribution that I can make to our research needs in teacher education? I must leave this question with you—whether or not you choose to make your contribution through conducting experimental research, or simply making it possible for others to conduct it, or by attempting to develop research-orientation.

ELEMENTARY DISCUSSION GROUPS

Group	Leader	Recorder
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K-I
Mabel Hineline
Lela Pinegar

II
Gladys Christian
Louise Hale

III
Mary Alice Flesher
Maxine Peacock

IV
Juanita Sparks
Thelma Shipman

V-VI
Herman Neckar
Mary Pennington

Topic: How Can We Identify and Utilize New Ideas in Student Teaching?

"Every idea is a new idea until you try it." This statement made in one of the elementary group meetings envelopes the reports from the five group sessions.

The major points of discussion at the primary level were concerned with these subjects:

A. Time for Supervising Teacher-Student Teacher Conferences

Could there be released time from teaching for this? "Conferencing" soon after the class is taught aids in analyzing the teaching-learning situation and in evaluating the student teacher's progress. Self-evaluation should be included.

B. Teaching Experiences

The transition from one activity to another is necessary. The importance of reading suggests early and much experience with the teaching of reading. Definite directions necessitate verbalization but should not prevent teachers from giving young children opportunities for self-direction.

C. Techniques for Supervising Teachers

Observe for the purpose of instruction as well as evaluation. Encourage problem-solving teaching. Develop a new idea with the student teacher. Help student teachers work creatively from written lesson plans, using time profitably.

Accept student teachers where they are and add to their education as richly as possible.

The intermediate group discussions centered around leading questions.

A. When should conferences be held?

Develop standards first and then be relaxed and friendly. Use all available time away from pupils for "conferencing" purposes.

B. How much constructive criticism should be given?

Student teachers should know why their teacher approved or criticized. The tape recorder can serve as a tool for self-evaluation. Student teachers should overcome weaknesses in writing on the chalk board, knowledge of phonics, and use of language early in their teaching.

C. What kind of planning should be expected?

Student teachers need something concrete with which to work. They need help with long-range

planning and should discuss objectives for each day. Ideas used should be practical and sound.

D. How can student teachers be helped with discipline?

Use the problem-solving method of teaching and guide children to self-discipline. Encourage student teacher to work with behavior problems individually and evaluate positive results accomplished. In all teaching, be prepared, be fair, and be consistent.

BUSINESS EDUCATION DEPARTMENT

Moderator: Paul Muse

Chairman: Wynnie Ford

Topic: The Student Teachers' Reactions to Student Teaching

A panel composed of three first-year teachers and three student teachers discussed problems in the following two areas: "Student-Teacher Weaknesses That Should be Detected by the Supervising Teacher and Then Discussed with the Student Teacher" and "Observations and Suggestions by Student Teachers and First-Year Teachers for Strengthening Our Program of Student Teaching."

The problems discussed had been contributed by former student teachers in business education. Topics discussed included problems in the following areas: class presentation, lesson plans, evaluation, professional ethics and attitude; teaching, conferences, and grading.

The panel was moderated by Dr. Paul Muse, Chairman, Department of Business, Indiana State Teachers College. The panel was composed of the following persons: Miss Barbara Beno, Clinton High School, Clinton, Indiana; Miss Kay Cockcroft, Hutsonville High School, Hutsonville, Illinois; George Hamilton, Horace Mann High School, Gary, Indiana; Mrs. Anita Landenberger; Leon Pickard; Miss Donna Shields.

I. Presentation

- A. Use of poor English
- B. Distracting mannerisms
- C. Unsatisfactory voice
- D. Inadequate use of chalkboard
- E. Tendency to "tell" rather than "show"
- F. Failure to recognize learning opportunities for students
- G. Failure to illustrate through examples
- H. Failure to recognize problems early enough
- I. Failure to recognize and control situations which may lead to disciplinary problems.
- J. Carelessness in appearance.

II. Lesson Plans

- A. Unit and semester plans
- B. Daily lesson plans
 - 1. Check lesson plan with student teacher before presentation
 - 2. Analyze strong points and problem areas
 - 3. Suggestions:
 - a. How to provide for individual difference
 - b. Help student teacher to anticipate difficulties
 - c. Allocation of time
 - 4. Supplement suggestions with examples
 - 5. Textbooks and reference materials
 - a. Provide student teacher with a complete set of text books (teacher's manual, workbooks, etc.) in the subjects in which he is teaching—it is necessary for a student teacher to do a great deal of preparation
 - b. Available reference material

Observations and Suggestions by Student Teachers and First-Year Teachers for Strengthening Our Program of Student Teaching

I. Evaluation

- A. Explain what is expected of student teacher
- B. Go over rating scale with student teacher before he begins his teaching
 - 1. May be helpful to review with student teacher during semester
- C. Inform student teacher of rating
- D. Student evaluation of student teacher
- E. Have student teachers rate cooperating teachers

II. Professional Ethics and Attitude

- A. Show enthusiasm for teaching
- B. Do not refer to students, previous student teachers, and other teachers in a derogatory manner
- C. Provide opportunity for student teacher to make contacts with other teachers, etc.—make him feel a part of the school.
- D. Provide opportunities for student teacher to participate in extra-curricular activities.

III. Teaching

- A. Experiences, if possible, in planning and teaching both a skill and a non-skill subject.
- B. Allow student teacher the opportunity to use own initiative, ideas, and plans
- C. Introduce teaching load gradually
- D. Leave student teacher alone with class for short periods of time

IV. Conferences

- A. Informal conferences (during day, after class, noon, etc.)
 - 1. Gives student teacher an opportunity to clarify any questions he might have.
- B. Planned weekly conference
 - 1. Constructive suggestions—student teachers are interested in knowing their weaknesses and how they can improve

V. Grading

- A. Help in constructing tests
- B. Explain method of grading or evaluating work
- C. Opportunity and experience of giving six-week grades; especially if student teacher has been responsible for checking papers, etc.

ENGLISH DEPARTMENT

Chairman: **Mark Neville**

Consultants: **Ruth Morgan**
Marvin Carmony
James Mason
Robert Saalbach

Workshop on the Basic Issues in Teaching of English Today

Various points of view were expressed in regard to language, composition, and literature.

- 1. Emphasis was on teaching grammar from the "traditional" and "new" points of view.
- 2. Consensus was that beginning teachers need to understand the "old" before they can deal readily with the "new."
- 3. The need for greater knowledge of "speech" and a better understanding of teaching "talk" was stressed.

HOME ECONOMICS DEPARTMENT

Chairman: **Anne M. Lee**

Consultants: **Caroline Kelso**
Ruth Turner
Bonnie Barrick

Topic: Basic Issues in Home Economics

- 1. Student teachers know how to plan, have initiative, and are self-directive.
- 2. There are problems of provision of opportunities for carrying on a broad program and having the student teacher use a variety of teaching techniques in situations where the school curriculum is a limiting factor.

INDUSTRIAL EDUCATION DEPARTMENT

Chairman: Lewis W. Yoho

Recorder: Warren J. Wold

Topic: Evaluation as a Basis for Recommending Improvements in Student Teaching for Industrial Education Majors

Evaluation implies measurement, judgment and comparison. We need a standard in measurement as a basis for evaluation. A standard is determined by selecting criteria for evaluation.

The group selected the following criteria from the American Association of Colleges for Teacher Education (1956) for judging the qualities of a professional laboratory experience: 1. it should be challenging; 2. it should provide involvement; 3. it should provide for guidance and assistance; 4. it should provide for intellectualization; 5. it should be satisfying.

The following points were discussed under the first two criteria. An experience is challenging when: 1. the student teacher has an opportunity to pre-plan before arriving on the assignment; 2. the student teacher can see the program start and have an overview of the total plan; 3. the supervising teacher has a schedule for delegating increasing responsibility to the student teacher; 4. the student teacher has an opportunity to participate in alternate methods of teaching.

A student teacher is involved in professional experiences when: 1. he is introduced to the activities of the school; 2. there is an opportunity for him to assist his supervising teacher with school and extra assignments; 3. he is provided information on school policies, regulations, etc.; 4. he has the opportunity to attend faculty meetings and administrative sessions.

MATHEMATICS DEPARTMENT

Chairman: Joe Kennedy

Topic: Should the Student Teaching Experiences Include the New, or the Old?

1. Student teachers should be exposed to some of the "modern" mathematics in their student teaching.

2. Student teachers, if possible, should be exposed to problems of curricular revision. (A student teacher might be able to assist the supervising teacher in preparation of material for a fused geometry course.)

3. Observation and participating in teaching geometry units may be valuable experiences for student teachers.

4. Student teachers should have experiences with general mathematics and participate at several grade levels.

5. Student teaching experience should include the new and the old.

MUSIC DEPARTMENT

Chairman: James Barnes

Consultants: Martha Pearman

Gertrude Meyer

Topic: Providing Continuity in the Music Program. Grades I-XII

1. Miss Martha Pearman, Supervisor, Indiana State Teachers College Laboratory School, discussed and demonstrated the integrated program of general music in the Laboratory School. It stresses listening activities, playing records, harpsichord, singing, and instrumental exploration in which all have a chance to participate.

2. Music student teachers should have experience in primary grades as well as grade 7 to 13, even though consolidation tends to reduce the spread and variety of experiences. There is a great need for articulation throughout the entire school system including a well-planned program from the primary grades through the secondary grades.

3. Contests can be valuable but quite often they are presented at the expense of other musical activities and this over-emphasis can be very detrimental to the complete program.

PHYSICAL EDUCATION DEPARTMENT (Men)

Chairman: Walter Marks

Topic: Problems of the Cooperating Teacher

The following points were discussed:

1. Physical education equipment available.
2. Dressing rooms, showers, and drying rooms.
3. The interest in trampoline and gymnastic apparatus work to supplement basketball.
4. Credit evaluation in physical education.
5. Study of new ISTC physical education building facilities.
6. The 5-day week for physical education.

Problems discussed included:

1. Sizes of classes—too large.
2. Replacement of 70-minute period by 55-minute period.
3. Questions of students' participating in athletic programs also participating in gym.
4. Limitation of practice sessions for 7-8-9 grade boys.

PHYSICAL EDUCATION DEPARTMENT (Women)

Chairman: Eleanor Forsythe

Topic: *Helping the Student Teacher Discover New Frontiers in Teaching*

- I. In order for the student teacher experience to be an exciting and satisfying adventure, there must be cooperation from every level. The following contributions and responsibilities of the various levels were identified.

A. Department of Secondary Teaching

1. Define the responsibility of the supervising teacher
2. Send full information including the *Student Teaching* booklet and proper schedule of teaching

B. Departmental Coordinator of the College

1. Verify assignment of student teacher for a teaching situation.
2. Help student teachers understand their responsibility.
3. Identify areas of inadequacy in the student teacher's experiences and discuss with the supervising teacher.

C. Supervising Teacher

1. Help the student teacher see the framework of responsibility in his experience.
2. Introduce the student teacher to other faculty members in order that she may have status.
3. Help the student teacher understand physical education in relation to the entire school curriculum.
4. Give proper guidance and example by presenting evidence of a well-planned program. There should be a written yearly plan, weekly plan, and daily lesson plans.
5. Help the student teacher understand the needs of the pupils in class and how to recognize and plan for individual differences in class.
6. Provide as many different kinds of experiences as possible: i.e., faculty meetings, study halls, G.A.A., noon duty.
7. Schedule and find time for ample conferences in order that the student teacher may correct her mistakes as they occur. The co-operating notebook is fine for recording these, but actual face-to-face discussion needs to be present. The student teacher needs to explore and discuss varied means of evalua-

ting and improving her own teaching and planning.

8. By example, teach student teachers that there are a number of ways for teaching physical
9. Give student teachers an opportunity to participate in testing and grading.
10. Maintain the interest of her own pupils while working with the student teacher

D. Student Teachers

1. Assume responsibility for self.
2. Recognize the necessity of adequate planning.
3. Utilize various resources for teaching.
4. Experiment with varied approaches in teaching. Utilize teaching aids.
5. Become increasingly aware of the importance of the pupil, not the subject matter.
6. Recognize that various age levels have different needs and interests.
7. Maintain a proper teacher-pupil relationship.
8. Recognize student teaching as an exploratory experience and not hesitate to try new ideas.
9. Develop resources for solving own problems.

- II. The supervising teachers helped to identify some of the existing weaknesses in student teachers from Indiana State

- A. Need of a background in track and field. This lack has been handled through the methods course this year.
- B. Student teachers do not seem to understand progression in relation to grade level. This problem has been discussed in both administration and methods classes. The staff at Indiana State is also working on the solution to this problem.

- III. There should be more direct communication between the college department and the supervising teacher.

SCIENCE DEPARTMENT

Chairman: William Brett

Participants: Charles Brenton
James Harrah
James Malloy
Kenneth Payne

Consultants: John Hook
William Kessel
John McCarthy

Topic: *Innovations Desired in Student Teacher Preparation as Seen by the Supervising Teacher*

1. The supervising teacher should get a copy of the student teacher's transcript so that the former may evaluate the strengths and weaknesses of the student teacher's background.

Weaknesses noted in backgrounds of student teachers included: (a) biology majors did not have enough chemistry; (b) it is not possible for an individual to have a restricted area in general science and be prepared to teach in that area. (Perhaps something could be done by the State Licensing Commission to be more selective in granting licenses for general science teachers.)

3. It is probably a good idea to inform the student teacher on visitation day of the material he will be teaching and in this way the student teacher could prepare his units in advance.

4. The student teacher should be given a bigger load during his student teaching as preparation for actual teaching experience. (Two courses in both comprehensive and restricted areas in addition to study hall were suggested as "standard.")

5. Outside work detracts from the efficiency of student teaching.

6. The position of the supervising teacher in working with the student teacher who is not ready to teach or can not teach was mentioned.

7. The possibility of placing the supervising teacher's name on the student teacher's credentials so prospective employers could contact the former was noted.

8. Initiation of a "cadet program" at the college so that prospective teachers could get some teaching experience before the senior year was discussed.

SOCIAL STUDIES DEPARTMENT

Chairman: Cloyd Anthony

Consultants: C. W. Engelland

Donald B. Scheick

Arthur Dowell

Topic: The Subject Matter Preparation of Social Studies Student Teachers

Four major questions were discussed:

1. Is there an advantage of a 60-semester hour special over a 40-semester hour comprehensive? The 60-hour program gives preparation in depth essential in good social studies teaching.

2. How can we prepare young social studies teachers who are competent to deal with the how, why and what-effect level—rather than purely factual material?

3. Is the undergraduate preparation too "theoretical" and not enough "practical?"

4. How well does the subject matter studied in college correlate with the subject matter generally taught in the secondary school?

SPECIAL EDUCATION DEPARTMENT

Chairman: Margaret Rowe

Consultant: Rutherford Porter

Topic: Problem of Special Education

Discussion was concerned with the following topics:

1. Time the student teacher should spend in actual teaching, participation, and observation.

2. Observation of other areas within the school program.

3. Group therapy in speech correction. Individual therapy vs. group therapy.

4. The problem of doing student teaching in two areas of special education.

5. The use of lesson plans.

SPEECH DEPARTMENT

Chairman: Ellis Hays

Department Supervisor: Gladys M. Rohrig

Topic: What Can Speech Do for the High School Student?

A social period during which a committee of speech majors presided preceded the discussion.

Secondary supervising teachers participated in a symposium in which they outlined their own philosophy of secondary school speech education:

1. Students often do not realize how important speech education is until they get jobs or enter college. Some basic education in speech should be required of all. In addition, special courses should be offered for the gifted to introduce them to new activities and interests.

2. Beginning speech classes must consider each individual's ability. Speech activities offer a tremendous opportunity for counseling.

3. The speech teacher must have high quality and select quality materials, as high caliber plays.

4. It must be remembered that speaking comes before reading and writing, contrary to emphasis advocated by a nationally-known educator.

5. Speech should be taught to the slow, the average, and the talented students.

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sons—including the student—in the selection process; it will utilize comprehensive student personnel records adequately reflecting the growth and potential of prospective teachers in all aspects of their curricular and extra curricular activities; it will utilize the best and most sophisticated types of measurement we are capable

of producing; and it will work toward enabling us to make sounder judgments about those who are preparing to teach. Such a program is a requisite when we view our societal responsibility to literally guarantee that teachers are qualified to begin to teach in such a manner that children and youth will not suffer.

